



Figure 1

ggcgccgcgc cgcgcgcgc cgcgcgcgc gcgcgcgc ttcctcctc cctctcttc tcccttgccg tcgcgcgc gcgcgcgc ggcgcgcgc 100

cccgcgccgc ggcgcgcgc cctcggcgc cctggcctcc ggggtccct aggcgcgc ggggcgcgc cgcgcgcgc tgcgcgcgc tctgtaccc 200

accaccacca ccaccagggc cgcgcgcgc ggcgcgcgc aggggcgcgc cctaggcgc tggcgATGGG GCGCGTCCGG ATCGCGCCCG GCGTGGCGCT 300
M G A U R I A P G L A L

GCTGCTCTGC TGCCCGGTGC TCAGCTCCGC GTACGCGCTG GTGGATGCG ATGACGTCAT GACCAAGAG GAGCAGATCT TCCTGCTGCA CCGCGCCCG 400
L L C C P U L S S A Y A L U D A D D U M T K E E Q I F L L H R A Q

GCCCGTGC CAGAGCGGT CAGAGAGTC CTGAGAGGC CAGCTGACAT AATGGAATCA GACAAAGGAT GCGCTTCTGC ATCCACATCA GCGAGGCCTA 500
A Q C Q K R L K E U L Q A P A D I M E S D K G W A S A S T S G K P K

AGAAAGAGAA GGCATCTGGG AAGCTCTACC CTGAGTCCGA GAGGAGCAG GAGGTGCCCA CTGGCAGCAG GCACCGAGGG CGCCCTCTGC TGCCCGAGTG 600
K E K A S G K L Y P E S E E D K E U P T G S R H A G R P C L P E W

GGACCAATCA CTTTGTCTGC CGCTGGGGGG ACCAGGTGAG GTGGTGGCTG TGCCCTGTCC CGACTACATT TATGACTTCA ATCACAAGG CCATGCTTAC 700
D H I L C W P L G A P G E U U A U P C P D Y I Y D F N H K G H A Y

CGTGCCTGTG ACCGCAATGG CAGCTGGGAG CTGGTGGCTG GACCAACCG GACGTGGGCG AACTACAGCG AGTGTCAR GTTCTGTACC AACGAGCTC 800
R A C D R N G S M E L U P G H N A T W A N Y S E C U K F L T N E T A

GTGACGGGA GGTGTTTGC CGCTGGGCA TGATCTACAC CTGGGCTAC TCGGTGTCG TGGCTTCTCT CACCGTGGCG GTGCTATCC TGGCTTACTT 900
E A E U F D R L G M I Y T U G Y S U S L A S L T U A U L I L A Y F

CAGGCGGCTG CACTGCACAC GCACTACAT CCAGTGCAC CTGCTCTGT CTTCTATGCT TCGCGCGGTG AGCATCTTCC TCAGGAGCG GGTGCTCTAD 1000
R R L H C T R N Y I H M H L F L S F M L R A U S I F U K D A U L Y

TCGGGCGCA CGCTCGACGA GCGCGAGCG CTACCGAGG AGAGCTGCG CGCATCGC CAGGACCCCG CGCCGCCCGC CGCCGCCCGC GGTACGCGG 1100
S G A T L D E A E R L T E E E L R A I A Q A P P P P T A A A G Y A G

GCTGCGGGT AGCTGTGACC TTCTCTCTT ATTTCTTGG CACCACTAC TACTGGATTC TGGTGGAGGG GTGTACCTG CATAGTCTCA TCTTATGGT 1200
C R U A U T F F L Y F L A T N Y Y M I L U E G L Y L H S L I F M A

CTTCTCTCA GAGAGAGT ACCTGAGG CTTCAGGTC TTGCGTGGG GTCTGCGCG GTCTTCTG GTGTGTGGG TCAGGAGAG AGCCACCTG 1300
F F S E K K Y L M G F T U F G W G L P A U F U A U M U S U R A T L

GCAACACCG GGTGCTGGG CTTGAGCTCC GGGACAGGA AGTGATCT CCAGTGGCG ATCTGAGCT CTATGTGCT CAATTCATC TTGTCATCA 1400
A N T G C M D L S S G N K K W I I Q U P I L A S I U L N F I L F I N

ACATGCTCG GGTGCTGGG ACAGAGCTG GGGAGACCA TGCCGGCCCG TGTGACACG GGCAGCAGTA CCGGAGCTG CTCAGATCCA CACTGGTGT 1500
I U R U L A T K L A E T N A G A C D T R Q Q Y R K L L K S T L U L

CACTGCTCT TTTGGGCTC ACTACATCT CTTCATGCG ACCTGATCA CCGAGGTCT AGGGACGCTC TGGCAGTCC AGATGACTA CAGGTGCTG 1600
M P L F G U H Y I U F M A T P Y T E U S G T L W Q U Q M H Y E N L

TTCACTCTCT TCAGGAGAT TTTGCTGCC ATCATATCT GTTCTGCA TGGCGAGGA CAGGCGGGA TCAGGAATC CTGGAGCCCG TGGACACTGG 1700
F N S F Q G F F U A I I Y C F C N G E U Q A E I K K S W S A W T L A

CCCTGACTT CAGCGCAGG GCGCGAGTG GAGCAGCAG TTACAGTAC GCGCGATGG TGTCTCAC GAGCGTGACC AACGTAGGCC CCGCGCGGG 1800
L D F K R K A R S G S S S Y S Y G P N U S H T S U T N U G P R A G

ACTTGGCTG CCGCTCAGC CCGGCTGCT GCGCGCGCT GCGCGCACA CCACTGCTC CACCAACGGC CACCCCGCA TCCCGGCGA CACCAAGCCA 1900
L G L P L S P A L L P A A A A T T T A T T N G H P P I P G H T K P

GCGCGCGCG CCGTCCCGC CACACCACT GCGCGGCTG CTCCAGGA CAGTGGGTC CTCACGGCT CCGCTCGGG GCTGGACAG GAGGCTCGG 2000
G A P T L P A T P P A T A A P K D D G F L N G S C S G L D E E A S A

GCGCGAGCG GCGTCCCGC CTGCTGAGG AGGAGTGGG GAGGCTCATG TGATGGGGA CCGTGGCG ggttggactc gttgacataa ggcgcgcgc 2100
P E R P P A L L Q E E W E T U M

acggaccag agacaggcg tttgacagt gccactcag ggttggggt gggaagaca aacaaacaa aaaaaaa 2177

Figure 2

dPTH1	ATGGGGCCG	CCGGATCGC	CCCGGCTG	CGCTGCT	CTCTGCTGCC	GTGCTCAGC	TCCGCTAGG	CGCTG	75
rPTH1	ATGGGGCCG	CCGGATCGC	CCCGGCTG	CGCTGCT	CTCTGCTGCC	GTGCTCAGC	TCCGCTAGG	CGCTG	75
mPTH1	ATGGGGCCG	CCGGATCGC	CCCGGCTG	CGCTGCT	CTCTGCTGCC	GTGCTCAGC	TCCGCTAGG	CGCTG	75
hPTH1	ATGGGGCCG	CCGGATCGC	CCCGGCTG	CGCTGCT	CTCTGCTGCC	GTGCTCAGC	TCCGCTAGG	CGCTG	75
dPTH1	GTGGATGCG	ATGAGTGTAT	TACAAAAGAG	GACAGAT	TTCTGCTGCA	CCGTCG	CAGGCCAGT	AGC	150
rPTH1	GTGGATGCG	ATGAGTGTAT	TACAAAAGAG	GACAGAT	TTCTGCTGCA	CCGTCG	CAGGCCAGT	AGC	150
mPTH1	GTGGATGCG	ATGAGTGTAT	TACAAAAGAG	GACAGAT	TTCTGCTGCA	CCGTCG	CAGGCCAGT	AGC	150
hPTH1	GTGGATGCG	ATGAGTGTAT	TACAAAAGAG	GACAGAT	TTCTGCTGCA	CCGTCG	CAGGCCAGT	AGC	150
dPTH1	CTGCTCAAG	AGTCTGCA	GAGGCAGCT	GACATAATGG	ATCAGACAA	AGGATGGCT	CTGCTCA	CATCA	225
rPTH1	CTGCTCAAG	AGTCTGCA	GAGGCAGCT	GACATAATGG	ATCAGACAA	AGGATGGCT	CTGCTCA	CATCA	225
mPTH1	CTGCTCAAG	AGTCTGCA	GAGGCAGCT	GACATAATGG	ATCAGACAA	AGGATGGCT	CTGCTCA	CATCA	225
hPTH1	CTGCTCAAG	AGTCTGCA	GAGGCAGCT	GACATAATGG	ATCAGACAA	AGGATGGCT	CTGCTCA	CATCA	225
dPTH1	GGGAAGCCTA	GGAAAGAA	GGCATCTGG	AAGTCTACC	CTGAGTCTAA	AGAGACAAG	GAGGTCCCA	CTGGC	300
rPTH1	GGGAAGCCTA	GGAAAGAA	GGCATCTGG	AAGTCTACC	CTGAGTCTAA	AGAGACAAG	GAGGTCCCA	CTGGC	300
mPTH1	GGGAAGCCTA	GGAAAGAA	GGCATCTGG	AAGTCTACC	CTGAGTCTAA	AGAGACAAG	GAGGTCCCA	CTGGC	300
hPTH1	GGGAAGCCTA	GGAAAGAA	GGCATCTGG	AAGTCTACC	CTGAGTCTAA	AGAGACAAG	GAGGTCCCA	CTGGC	300
dPTH1	AGCAGGCTAC	GAGGCGCTC	CTGCTGCC	GAGTGGGAC	ACATCTTTG	CTGGCGCTG	GGGGACCAG	GTGAG	375
rPTH1	AGCAGGCTAC	GAGGCGCTC	CTGCTGCC	GAGTGGGAC	ACATCTTTG	CTGGCGCTG	GGGGACCAG	GTGAG	375
mPTH1	AGCAGGCTAC	GAGGCGCTC	CTGCTGCC	GAGTGGGAC	ACATCTTTG	CTGGCGCTG	GGGGACCAG	GTGAG	375
hPTH1	AGCAGGCTAC	GAGGCGCTC	CTGCTGCC	GAGTGGGAC	ACATCTTTG	CTGGCGCTG	GGGGACCAG	GTGAG	375
dPTH1	GTGGTGGG	TGCTCTGTC	GATACATT	TATGACTTCA	ATCACAAAG	CCATGCCCTAC	AGCGCTG	ACCGC	450
rPTH1	GTGGTGGG	TGCTCTGTC	GATACATT	TATGACTTCA	ATCACAAAG	CCATGCCCTAC	AGCGCTG	ACCGC	450
mPTH1	GTGGTGGG	TGCTCTGTC	GATACATT	TATGACTTCA	ATCACAAAG	CCATGCCCTAC	AGCGCTG	ACCGC	450
hPTH1	GTGGTGGG	TGCTCTGTC	GATACATT	TATGACTTCA	ATCACAAAG	CCATGCCCTAC	AGCGCTG	ACCGC	450
dPTH1	AATGGCAGCT	GGGAGTGGT	CCGGAAC	AACGGACGT	GGGCCAACTA	CAGCGAGTGT	GTCAATTTTC	TACC	525
rPTH1	AATGGCAGCT	GGGAGTGGT	CCGGAAC	AACGGACGT	GGGCCAACTA	CAGCGAGTGT	GTCAATTTTC	TACC	525
mPTH1	AATGGCAGCT	GGGAGTGGT	CCGGAAC	AACGGACGT	GGGCCAACTA	CAGCGAGTGT	GTCAATTTTC	TACC	525
hPTH1	AATGGCAGCT	GGGAGTGGT	CCGGAAC	AACGGACGT	GGGCCAACTA	CAGCGAGTGT	GTCAATTTTC	TACC	525
dPTH1	AATGAGACTC	GTGAACGGGA	GGTATTGAC	CGCCTGGCA	TGATTACAC	CGTGGGATAC	TCCATGTCTC	TGGC	600
rPTH1	AATGAGACTC	GTGAACGGGA	GGTATTGAC	CGCCTGGCA	TGATTACAC	CGTGGGATAC	TCCATGTCTC	TGGC	600
mPTH1	AATGAGACTC	GTGAACGGGA	GGTATTGAC	CGCCTGGCA	TGATTACAC	CGTGGGATAC	TCCATGTCTC	TGGC	600
hPTH1	AATGAGACTC	GTGAACGGGA	GGTATTGAC	CGCCTGGCA	TGATTACAC	CGTGGGATAC	TCCATGTCTC	TGGC	600
dPTH1	TCCCTCAGG	TGGCTGTGCT	CATCCTAGCC	TATTTAGGC	GGCTGCACTG	CACCGCAAC	TACATCCACA	TGCAC	675
rPTH1	TCCCTCAGG	TGGCTGTGCT	CATCCTAGCC	TATTTAGGC	GGCTGCACTG	CACCGCAAC	TACATCCACA	TGCAC	675
mPTH1	TCCCTCAGG	TGGCTGTGCT	CATCCTAGCC	TATTTAGGC	GGCTGCACTG	CACCGCAAC	TACATCCACA	TGCAC	675
hPTH1	TCCCTCAGG	TGGCTGTGCT	CATCCTAGCC	TATTTAGGC	GGCTGCACTG	CACCGCAAC	TACATCCACA	TGCAC	675
dPTH1	CTGTTCTGT	CTTTATGCT	CGCGCCCG	AGCATCTTCG	TAAAGGACGC	GTGCTCTAC	CTGGCTCA	CGCTG	750
rPTH1	CTGTTCTGT	CTTTATGCT	CGCGCCCG	AGCATCTTCG	TAAAGGACGC	GTGCTCTAC	CTGGCTCA	CGCTG	750
mPTH1	CTGTTCTGT	CTTTATGCT	CGCGCCCG	AGCATCTTCG	TAAAGGACGC	GTGCTCTAC	CTGGCTCA	CGCTG	750
hPTH1	CTGTTCTGT	CTTTATGCT	CGCGCCCG	AGCATCTTCG	TAAAGGACGC	GTGCTCTAC	CTGGCTCA	CGCTG	750
dPTH1	GATGAGGCTG	AGCGCTCAC	AGAGGAGAG	GTGCGGCA	TCGTCAGGC	ACCCCGCCG	CCGCGCG	CCGC	825
rPTH1	GATGAGGCTG	AGCGCTCAC	AGAGGAGAG	GTGCGGCA	TCGTCAGGC	ACCCCGCCG	CCGCGCG	CCGC	812
mPTH1	GATGAGGCTG	AGCGCTCAC	AGAGGAGAG	GTGCGGCA	TCGTCAGGC	ACCCCGCCG	CCGCGCG	CCGC	812
hPTH1	GATGAGGCTG	AGCGCTCAC	AGAGGAGAG	GTGCGGCA	TCGTCAGGC	ACCCCGCCG	CCGCGCG	CCGC	824
dPTH1	GGC-----	-----	TACGGGGCTG	CAGGTGCT	GTGACCTTCT	TCCTTATT	CTTGGGACC	AACCTA	884
rPTH1	GGC-----	-----	TACGGGGCTG	CAGGTGCT	GTGACCTTCT	TCCTTATT	CTTGGGACC	AACCTA	887
mPTH1	GGC-----	-----	TACGGGGCTG	CAGGTGCT	GTGACCTTCT	TCCTTATT	CTTGGGACC	AACCTA	887
hPTH1	GGC-----	-----	TACGGGGCTG	CAGGTGCT	GTGACCTTCT	TCCTTATT	CTTGGGACC	AACCTA	887
dPTH1	CTACTGGATT	CTGGTGGAGG	GCTGTAGCT	SCAAGCTC	ATCTTCATGG	CCTTTTCTC	AGAGAAGAAG	TACT	959
rPTH1	CTACTGGATT	CTGGTGGAGG	GCTGTAGCT	SCAAGCTC	ATCTTCATGG	CCTTTTCTC	AGAGAAGAAG	TACT	962
mPTH1	CTACTGGATT	CTGGTGGAGG	GCTGTAGCT	SCAAGCTC	ATCTTCATGG	CCTTTTCTC	AGAGAAGAAG	TACT	962
hPTH1	CTACTGGATT	CTGGTGGAGG	GCTGTAGCT	SCAAGCTC	ATCTTCATGG	CCTTTTCTC	AGAGAAGAAG	TACT	962

Figure 2 con't

dPTH1	GTGGGGCTTC	ACGCTCTT	GG	GCTGGGGTCT	CCCGGCTC	TTCGTGGCTG	TGTGGGTGAG	GTGAGAGGC	ACCTT	1034			
rPTH1	GTGGGGCTTC	ACCATCTT	GG	GCTGGGGTCT	CCCGGCTC	TTCGTGGCTG	TGTGGGTGAG	GTGAGAGGC	ACCTT	1037			
mPTH1	GTGGGGCTTC	ACCATCTT	GG	GCTGGGGTCT	CCCGGCTC	TTCGTGGCTG	TGTGGGTGAG	GTGAGAGGC	ACCTT	1037			
hPTH1	GTGGGGCTTC	ACAGTCTT	GG	GCTGGGGTCT	CCCGGCTC	TTCGTGGCTG	TGTGGGTGAG	GTGAGAGGC	ACCTT	1037			
dPTH1	GGCCAACAAC	GGGTGCTGGG	ACT	TGAGCTC	GGGACAAAG	AAGTGGATCA	TCCAGGTGCC	CATCCTGGGC	TCTAT	1109			
rPTH1	GGCCAACAAC	GGGTGCTGGG	ACT	TGAGCTC	GGGACAAAG	AAGTGGATCA	TCCAGGTGCC	CATCCTGGGC	TCTAT	1112			
mPTH1	GGCCAACAAC	GGGTGCTGGG	ACT	TGAGCTC	GGGACAAAG	AAGTGGATCA	TCCAGGTGCC	CATCCTGGGC	TCTAT	1112			
hPTH1	GGCCAACAAC	GGGTGCTGGG	ACT	TGAGCTC	GGGACAAA	AAGTGGATCA	TCCAGGTGCC	CATCCTGGGC	TCTAT	1112			
dPTH1	TGTGCTCAAC	TTCATCTT	TT	TATCAACAT	CTCCGGGTG	CT	GCCCAQA	AGCT	CGGGA	GACCAAT	GCC	GGCCG	1184
rPTH1	TGTGCTCAAC	TTCATCTT	TT	TATCAACAT	CTCCGGGTG	CT	GCCCAQA	AGCT	CGGGA	GACCAAT	GCC	GGCCG	1187
mPTH1	TGTGCTCAAC	TTCATCTT	TT	TATCAACAT	CTCCGGGTG	CT	GCCCAQA	AGCT	CGGGA	GACCAAT	GCC	GGCCG	1187
hPTH1	TGTGCTCAAC	TTCATCTT	TT	TATCAACAT	CTCCGGGTG	CT	GCCCAQA	AGCT	CGGGA	GACCAAT	GCC	GGCCG	1187
dPTH1	GTGTGACAAG	AGGCAGCAGT	ACCGGAAGCT	GCTCAATCC	ACCTGGTGC	TATGCGCTCT	CTTTGGGTC	CACTA	1259				
rPTH1	GTGTGACAAG	AGGCAGCAGT	ACCGGAAGCT	GCTCAATCC	ACCTGGTGC	TATGCGCTCT	CTTTGGGTC	CACTA	1262				
mPTH1	GTGTGACAAG	AGGCAGCAGT	ACCGGAAGCT	GCTCAATCC	ACCTGGTGC	TATGCGCTCT	CTTTGGGTC	CACTA	1262				
hPTH1	GTGTGACAAG	AGGCAGCAGT	ACCGGAAGCT	GCTCAATCC	ACCTGGTGC	TATGCGCTCT	CTTTGGGTC	CACTA	1262				
dPTH1	CATGCTCTTC	ATGGCCTTC	CTACACCGA	GGTCTCAGGG	ACGCTTGGC	AATCCAGAT	GCACTA	AGAG	ATGCT	1334			
rPTH1	CACGCTCTTC	ATGGCCTTC	CTACACCGA	GGTCTCAGGG	ACATTTGGC	ASATCCAGAT	GCACTA	AGAG	ATGCT	1337			
mPTH1	CACGCTCTTC	ATGGCCTTC	CTACACCGA	GGTCTCAGGG	ACATTTGGC	ASATCCAGAT	GCACTA	AGAG	ATGCT	1337			
hPTH1	CATGCTCTTC	ATGGCCTTC	CTACACCGA	GGTCTCAGGG	ACGCTTGGC	AATCCAGAT	GCACTA	AGAG	ATGCT	1337			
dPTH1	CTTCAACTCC	TTCAGGGAT	TTTTTGT	TGC	TATCATATAC	TGTTTCTGCA	ATGGGAGGT	ACAAGC	AGAG	ATTAA	1409		
rPTH1	CTTCAACTCC	TTCAGGGAT	TTTTTGT	TGC	TATCATATAC	TGTTTCTGCA	ATGGGAGGT	ACAAGC	AGAG	ATTAA	1412		
mPTH1	CTTCAACTCC	TTCAGGGAT	TTTTTGT	TGC	TATCATATAC	TGTTTCTGCA	ATGGGAGGT	ACAAGC	AGAG	ATTAA	1412		
hPTH1	CTTCAACTCC	TTCAGGGAT	TTTTTGT	TGC	TATCATATAC	TGTTTCTGCA	ATGGGAGGT	ACAAGC	AGAG	ATTAA	1412		
dPTH1	GAAATCTTGG	AGCCGCTGGA	CAGTGGGCT	GGACTTCAAG	CGAAAGGC	GAAGTGGGAG	TAGCAGTAC	AGCTA	1484				
rPTH1	GAAATCTTGG	AGCCGCTGGA	CAGTGGGCT	GGACTTCAAG	CGAAAGGC	GAAGTGGGAG	TAGCAGTAC	AGCTA	1487				
mPTH1	GAAATCTTGG	AGCCGCTGGA	CAGTGGGCT	GGACTTCAAG	CGAAAGGC	GAAGTGGGAG	TAGCAGTAC	AGCTA	1487				
hPTH1	GAAATCTTGG	AGCCGCTGGA	CAGTGGGCT	GGACTTCAAG	CGAAAGGC	GAAGTGGGAG	TAGCAGTAC	AGCTA	1487				
dPTH1	GGGCCGATG	GTGTCTCACA	CAAGTGTGAC	CAATGTGGC	CCCCGTCAG	GACTCAGCCT	CCCCCTAGC	CCCCG	1559				
rPTH1	TGGCCGATG	GTGTCTCACA	CAAGTGTGAC	CAATGTGGC	CCCCGTCAG	GACTCAGCCT	CCCCCTAGC	CCCCG	1562				
mPTH1	TGGCCGATG	GTGTCTCACA	CAAGTGTGAC	CAATGTGGC	CCCCGTCAG	GACTCAGCCT	CCCCCTAGC	CCCCG	1562				
hPTH1	GGGCCGATG	GTGTCTCACA	CAAGTGTGAC	CAATGTGGC	CCCCGTCAG	GACTCAGCCT	CCCCCTAGC	CCCCG	1562				
dPTH1	CCTGCTGCC	GCCGCTGCCG	CCACCACCA	CCGCAACC	AAAGGCCAOC	CCCGATGCC	GGCCACACC	AAGCC	1634				
rPTH1	CCTGCTGCC	GCCGCTGCCG	CCACCACCA	CCGCAACC	AAAGGCCAOC	CCCGATGCC	GGCCACACC	AAGCC	1616				
mPTH1	CCTGCTGCC	GCCGCTGCCG	CCACCACCA	CCGCAACC	AAAGGCCAOC	CCCGATGCC	GGCCACACC	AAGCC	1616				
hPTH1	CCTGCTGCC	GCCGCTGCCG	CCACCACCA	CCGCAACC	AAAGGCCAOC	CCCGATGCC	GGCCACACC	AAGCC	1619				
dPTH1	AGGGGCTCG	ACCT-----	CCCG-G-C	CACACCACCT	GCTATGGCTG	CTCCCAAGGA	CGATGGTTC	CTTAA	1700				
rPTH1	AGGGGCTCG	ACCT-----	CCCG-G-C	CACACCACCT	GCTATGGCTG	CTCCCAAGGA	CGATGGTTC	CTTAA	1688				
mPTH1	AGGGGCTCG	ACCT-----	CCCG-G-C	CACACCACCT	GCTATGGCTG	CTCCCAAGGA	CGATGGTTC	CTTAA	1688				
hPTH1	AGGGGCTCG	ACCT-----	CCCG-G-C	CACACCACCT	GCTATGGCTG	CTCCCAAGGA	CGATGGTTC	CTTAA	1694				
dPTH1	GGGCTCCTGC	TCAGGCTGG	ATGAGGAGGC	CTCGGGCT	GAGCGGCCTC	CTGCTGCT	ACAGGAGAG	TGGGA	1775				
rPTH1	GGGCTCCTGC	TCAGGCTGG	ATGAGGAGGC	CTCGGGCT	GAGCGGCCTC	CTGCTGCT	ACAGGAGAG	TGGGA	1763				
mPTH1	GGGCTCCTGC	TCAGGCTGG	ATGAGGAGGC	CTCGGGCT	GAGCGGCCTC	CTGCTGCT	ACAGGAGAG	TGGGA	1763				
hPTH1	GGGCTCCTGC	TCAGGCTGG	ATGAGGAGGC	CTCGGGCT	GAGCGGCCTC	CTGCTGCT	ACAGGAGAG	TGGGA	1769				
dPTH1	GACGTCATG	TGA							1788				
rPTH1	GACGTCATG	TGA							1776				
mPTH1	GACGTCATG	TGA							1776				
hPTH1	GACGTCATG	TGA							1782				

Seq. ID No. 3A dPTH1; Seq. ID No. 3B rPTH1; Seq. ID No. 3C mPTH1 & Seq. ID No. 3D hPTH1

Figure 3

dPTH1	100	MGAVRIAPGL ALLCCPVLS SAYALVDADD VMTKEEQIFL LHRQAQDQK RLKEVILQRPATIMESDKGWA SASTSGKPKK EKASGKTYPE SSKENKDVPTG
rPTH1	100	MGAVRIAPGL ALLCCPVLS SAYALVDADD VMTKEEQIFL LHRQAQDQK RLKEVILQRPATIMESDKGWA SASTSGKPKK EKASGKTYPE SSKENKDVPTG
mPTH1	100	MGAVRIAPGL ALLCCPVLS SAYALVDADD VMTKEEQIFL LHRQAQDQK RLKEVILQRPATIMESDKGWA SASTSGKPKK EKASGKTYPE SSKENKDVPTG
hPTH1	100	MGAVRIAPGL ALLCCPVLS SAYALVDADD VMTKEEQIFL LHRQAQDQK RLKEVILQRPATIMESDKGWA SASTSGKPKK EKASGKTYPE SSKENKDVPTG
dPTH1	200	SRHGRPCLP EWDHITLCWPL GAPGEVAVP CPDYIYDFNH KGHAYRRCDR NGSWELVPGH NRTWANYSEC MKFLTNETRE REVFDRLGMI YTVGYSVSLA
rPTH1	200	SRHGRPCLP EWDHITLCWPL GAPGEVAVP CPDYIYDFNH KGHAYRRCDR NGSWELVPGH NRTWANYSEC MKFLTNETRE REVFDRLGMI YTVGYSVSLA
mPTH1	200	SRHGRPCLP EWDHITLCWPL GAPGEVAVP CPDYIYDFNH KGHAYRRCDR NGSWELVPGH NRTWANYSEC MKFLTNETRE REVFDRLGMI YTVGYSVSLA
hPTH1	200	SRHGRPCLP EWDHITLCWPL GAPGEVAVP CPDYIYDFNH KGHAYRRCDR NGSWELVPGH NRTWANYSEC MKFLTNETRE REVFDRLGMI YTVGYSVSLA
dPTH1	299	SLTVAVLILA YFRRHLHCTRN YIHMHLFLSF MLRAVLSIFVK DAVLYSGATL DEARLTEEE LRAIAQAPPP PTAAA GYAG CRVAVTFFLY FLATNYWII
rPTH1	300	SLTVAVLILA YFRRHLHCTRN YIHMHLFLSF MLRAVLSIFVK DAVLYSGATL DEARLTEEE LRAIAQAPPP PTAAA GYAG CRVAVTFFLY FLATNYWII
mPTH1	300	SLTVAVLILA YFRRHLHCTRN YIHMHLFLSF MLRAVLSIFVK DAVLYSGATL DEARLTEEE LRAIAQAPPP PTAAA GYAG CRVAVTFFLY FLATNYWII
hPTH1	300	SLTVAVLILA YFRRHLHCTRN YIHMHLFLSF MLRAVLSIFVK DAVLYSGATL DEARLTEEE LRAIAQAPPP PTAAA GYAG CRVAVTFFLY FLATNYWII
dPTH1	399	VEGLYLHSLI FMAFFSEKKY LWGFTVFGWG LPAVFVAVWV SVRATLANTG CWDLSSGKKK WIIQVPILAS IVLNFILFIN IMRVLATKLR ETNAGRCOTR
rPTH1	400	VEGLYLHSLI FMAFFSEKKY LWGFTVFGWG LPAVFVAVWV SVRATLANTG CWDLSSGKKK WIIQVPILAS IVLNFILFIN IMRVLATKLR ETNAGRCOTR
mPTH1	400	VEGLYLHSLI FMAFFSEKKY LWGFTVFGWG LPAVFVAVWV SVRATLANTG CWDLSSGKKK WIIQVPILAS IVLNFILFIN IMRVLATKLR ETNAGRCOTR
hPTH1	400	VEGLYLHSLI FMAFFSEKKY LWGFTVFGWG LPAVFVAVWV SVRATLANTG CWDLSSGKKK WIIQVPILAS IVLNFILFIN IMRVLATKLR ETNAGRCOTR
dPTH1	499	QQYRKLIKST LVLMPFLGVH YIVFMAIPYT EVSGTLWQVQ MHYEMLFNSF QGFFVAVIYC FCNGEVQAEI KKSWSRWTLA LDFKRRKARS SSSYSYGPV
rPTH1	500	QQYRKLIKST LVLMPFLGVH YIVFMAIPYT EVSGTLWQVQ MHYEMLFNSF QGFFVAVIYC FCNGEVQAEI KKSWSRWTLA LDFKRRKARS SSSYSYGPV
mPTH1	500	QQYRKLIKST LVLMPFLGVH YIVFMAIPYT EVSGTLWQVQ MHYEMLFNSF QGFFVAVIYC FCNGEVQAEI KKSWSRWTLA LDFKRRKARS SSSYSYGPV
hPTH1	500	QQYRKLIKST LVLMPFLGVH YIVFMAIPYT EVSGTLWQVQ MHYEMLFNSF QGFFVAVIYC FCNGEVQAEI KKSWSRWTLA LDFKRRKARS SSSYSYGPV
dPTH1	595	SHTSVTNVGP RAGLGLPLSP RLIPATAAATTAINGHPPI PGHAKPGAPA L---PATIPPA TAAPKDDGFL NGSCSGLDEE ASARPPAL LQEEWETVM
rPTH1	591	SHTSVTNVGP RAGLGLPLSP RLIPAT-----INGHSQL PGHAKPGAPA TET-ETIPVT MAVPKDDGFL NGSCSGLDEE ASARPPAL LQEEWETVM
mPTH1	591	AHTSVTNVGP RAGLGLPLSP RLIPAT-----INGHSQL PGHAKPGAPA IEN-ETIPVT MTPVKDDGFL NGSCSGLDEE ASARPPAL LQEEWETVM
hPTH1	593	SHTSVTNVGP RAGLGLPLSP RLIPAT-----INGHPQL PGHAKPGAPA LETLETPPA MAAPKDDGFL NGSCSGLDEE ASARPPAL LQEEWETVM

Seq. ID No. 2A dPTH1; Seq. ID No. 2B rPTH1; Seq. ID No. 2C mPTH1 and Seq. ID No. 2D hPTH1.

Figure 4

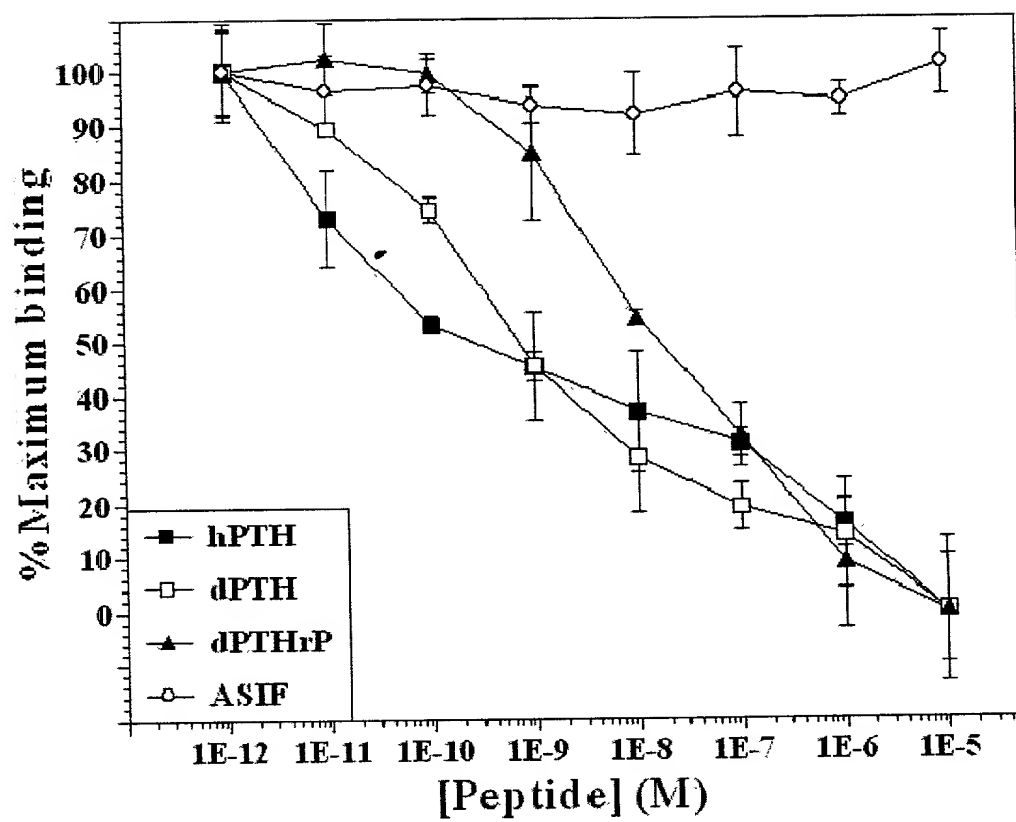


Figure 5

